

IN THE SPECIFICATION:

Please insert the following paragraph into page 1 of the specification prior to Field of the Invention:

Cross-Reference to Related Applications

This application claims priority from PCT International Publication Number WO 2004/110500 filed August 1, 2003 and from EPO Patent Application Number 02078228.0 filed August 2, 2002.

Please replace the paragraph at page 11, lines 20-29 with the following paragraph:

1.1. Protected L-2-bromomethyl-PHE

On L-2-methyl-Phe the tributyl ester and N-Boc protection is introduced by conventional chemistry (N-Boc: $(\text{BOC})_2\text{O}$, TEA, MeOH/tButOH, room temperature, 2 hours; Butylester: TMSL + tButOH or Li-O-t-butyl, room temperature, 24 hours). The protected compound is reacted in CCl_4 with Br-succinimide in the presence of benzoylperoxide as catalyst (radical halogenation) at ~~80°C~~ 80°C during 1 hour. After precipitation of the ~~succinimide~~ succinimide the product is purified by column chromatography.

Please replace the paragraph at page 12, lines 5-13 with the following paragraph:

1.2 Protected L-2-Tosethyl-Phe

L-2-I-Phe is obtained by ~~Cu¹⁺~~ Cu¹⁺ assisted iodo for bromo exchange on commercial available L-2-Br-Phe in acidic reducing aqueous condition (gentisic acid and SnSO_4 as reducing agent for CuSO_4). Protection is introduced as in 1.1. The ethyltosyl is introduced in 3 steps (a: vinylbromide, $\text{Pd}(\text{PPh}_3)_4$,

1,4-dioxane, ~~100°C~~, 100°C, 1 hour; b: BH₃-THF complex, 4N NaOH, 30% H₂O₂, THF, ~~0°C~~, 0°C, 2 hours; c: TsCl, DMAP, CH₂Cl₂, room temperature, 2 hours).

Please replace the paragraphs at page 13, lines 1-14 with the following paragraphs:

EXAMPLE 2

Radiochemical synthesis of compounds of the invention

L-D-¹⁸F-R-Phe analogues (R = methyl or ethyl) are prepared by nucleophilic exchange of ¹⁸F on L-/D-2-TosR-Phe in an AcN/TBA/HCO₃⁻ or AcN/K₂₂₂/CO₃²⁻ mixture at ~~85°C~~ 85°C during 5 minutes.

In short, ¹⁸F⁻ is separated from the target water via an anion exchange column. Elution of the activity is achieved with tetra-n-butyl ammonium ~~hydrogenearbonate~~ hydrogen carbonate in H₂O. H₂O is discarded by azeotropic distillation after addition of acetonitrile. L-2-Tosethyl-N-trityl-phenylalanine tert. butylester in dry acetonitrile is added to the ¹⁸F⁻ recipient and heated during 3-5 minutes at ~~85°C~~ 85°C. After the reaction the solvent is evaporated by means of preheated N₂.

Please replace the paragraph at page 14, lines 8-11 with the following paragraph:

A mean ~~K_i~~ K_i value of ~~76-μM~~ 76 μM was obtained for L-2-F-methyl-phenylalanine. This value is almost comparable with the ~~K_m~~ K_m value of ~~65-μM~~ 65 μM obtained for the natural L-phenylalanine in the same conditions.